

The Impact of the Covid-19 Pandemic on Members of The Rider's Alliance, an Organization of NYC Subway and Bus Riders Dedicated to Improving the NYC Transit System

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Understanding the impact Covid-19 had on NYC transit riders is critical, as the transit system serves as a lifeline to countless New Yorkers, enabling access not only to work, healthcare, education, and social services, but to all the activities that comprise daily life. Therefore, it's important to comprehend rider's post-pandemic transit priorities, their Covid-19 awareness levels, and the elements that contribute to their overall sense of safety amidst increased violence on NYC subways and buses. Additionally, identifying factors that would encourage riders to continue to use NYC transit in another pandemic has the potential to foster a more resilient community of transit riders, helping to ensure that the NYC transit system remains a dependable resource in times of both crisis and stability.

With questions addressing the time period from the onset of the pandemic in March of 2020, to October of 2023, a survey of NYC transit riders was conducted by researchers at the NYU School of Global Public Health. To accomplish this, NYU partnered with The Rider's Alliance, a New York City based grassroots organization comprised of subway and bus riders working to improve NYC's public transit system from the rider's perspective. Created by NYU researchers, the brief, anonymous survey was distributed via a link in The Rider's Alliance October, 2023 monthly newsletter. The survey was open from 10/26/23 - 1/12/23, and during that time 311 members responded.

#### **DEMOGRAPHICS**

Due to the small number of participants (N = 311 participants), survey reports published by the Metropolitan Transit Authority (MTA) were reviewed to determine if the demographics of the participants from The Riders Alliance mirrored the demographics reported by MTA surveys. The most recent report found that included demographics was the *MTA New York City Travel Survey* report published on June 30, 2020. The MTA stated the survey was completed by 14,416 households who use NYC transit<sup>1.</sup>

	2023 Rider's Alliance	2020 MTA NYC Travel Survey
	Survey participants	participants
Gender	51% female	59% female
	48% male	
	1% other	
Race	16% Black	27% Black
	70% White	37% White
	11% Asian	14% Asian
	2% Native American/	1% Native American/
	Alaskan Native	Alaskan Native
	1% Hawaiian Islander	0% Hawaiian Islander
Ethnicity	10% Hispanic	35% Hispanic
	90% Non-Hispanic	
Bachelor's degree or higher	84%	57%

New York City

Subway

Key differences are that Rider's Alliance participants were older, had a higher level of education, were less likely to report Hispanic ethnicity, and in terms of race, were more likely to be white. The mean age of Rider's Alliance survey participants was 47, and while the MTA survey collected information by age group, their largest age group of survey participants was much younger, between 25 – 34 years of age.

Additional demographic information revealed that a relatively small percent (14%) of the Rider's Alliance survey participants reported having a disability, while 31% reported a chronic health condition. In terms of Covid-19 infection, 71% of the Rider's Alliance survey participants reported a positive history for Covid-19, which is in line with US population estimates for Covid-19 infections<sup>2</sup>. The MTA has not yet published ridership Covid-19 infection data.

# **KEY FINDINGS**

#### **RIDERSHIP PATTERNS**

In exploring how frequently, for what duration, and at which times of the day participants typically used the bus or subway, our analysis revealed that participants may use the subway system more than the bus system to commute on a regular basis. Participants who rode the subway were more likely to have taken the subway four to five days a week, riding during the evening peak hours as compared to bus riders who rode fewer days of the week, and were more likely to take the bus in the middle of the day. Bus riders also spent less time on the bus during a typical day compared to subway riders. On a typical day, the percentage of subway riders who spent more than 2 hours on the subway was double the percentage of those who spent more than 2 hours on the bus.

- When asked how often they typically rode the subway, participants most frequently reported 4 to 5 days *a week*. When asked how often they typically used the bus, the response was 1 to 4 days *a month*.
- When the participants were asked about the time of day they typically rode the subway, most commonly reported was evening peak from 4pm to 7pm. When asked the same question about the bus, the answer was midday from 9am to 4pm.
- When the participants were asked on a typical day how much time they spent in the subway system *combining all trips* and including both on the subway platforms and on the train, the top three answers selected were 1 hour to 1 .5 hours (40%), half an hour to 1 hour (37%) and 2 hours to 2.5 hours (16%).
- When participants were asked on a typical day how much time they spent on the bus, combining all trips, the top three answers selected were half an hour to 1 hour (41%), less than half an hour (25%), and 1 hour to 1.5 hours (23%). The proportion of riders who reported spending from 2 to 2.5 hours on the subway (16%), was twice the proportion typically spent on the bus for 2 to 2.5 hours (8%). The same was true for those who, on a typical day, spent 3 hours or more on the subway (4%), compared to those who, on a typical day, spent 3 hours or more on the bus (2%).

## COVID-19 SAFETY PROTOCOL/ EDUCATED RIDERS

In general, survey participants reported adhering to safety protocols, prioritizing health over reduced fares, and were well educated in regard to transmission of Covid-19. When asked about mask usage during the first year of the pandemic, the vast majority of both bus and subway riders reported they wore masks "all", or "almost all" of the time. When asked what would make them more comfortable riding the subway or bus in a future pandemic, the top three responses were: (1) mask requirements, (2) increased ventilation and (3) social distancing. These were chosen over increased cleaning, reduced fare, information on protection, or the knowledge that the MTA had a pandemic plan.

- When asked how often participants wore masks on the subway during the first year of the pandemic, 89% reported either all the time, or almost all the time.
- When asked how often participants wore masks on the bus during the first year of the pandemic, 87% reported either all the time, or almost all the time.

#### NYC TRANSIT: COMFORT IN A FUTURE PANDEMIC/CURRENT SATISTFACTION

In the event of a future pandemic, a significant majority of bus riders and a slight majority of subway riders reported they would feel "somewhat" or "very comfortable" riding the subway or bus during another pandemic. In terms of satisfaction, neither subway nor bus riders reported a significant change since before the pandemic. In addition, at the time the survey was conducted, the majority of riders reported they were currently either "somewhat" or "very satisfied" with both the subway and bus systems. It's interesting to note that this aligned with a majority level of satisfaction reported in the MTA Spring 2023 Customers Count Survey which reported 56% subway satisfaction, and 65% bus satisfaction<sup>3</sup>. Importantly however, feelings of satisfaction and feelings of safety may not go hand in hand.

- When asked if they would feel comfortable riding the bus in a future pandemic, 65% reported they would feel either "somewhat comfortable" or "very comfortable".
- When asked if they would feel comfortable riding the subway in a future pandemic, 53% reported they would feel either "somewhat comfortable" or "very comfortable".
- When asked if their satisfaction with the subway system had changed compared to before the Covid-19 pandemic, 47% of riders said their satisfaction with the subway system hadn't changed, 31% said they were less satisfied now, and 16% said they were more satisfied now than before the pandemic.
- When asked about the bus system, 53% said their satisfaction hadn't changed compared to before the Covid-19 pandemic, 22% said they were less satisfied, and 16% said they were more satisfied than before the pandemic.

#### PERSONAL SAFETY

While most riders reported they would feel comfortable using NYC transit in a future pandemic, almost four years after the beginning of the Covid-19 pandemic, many riders reported greater concern for their personal safety while using the subway system, compared to pre-pandemic. The survey revealed that since the pandemic, the most significant change in use of transit is that riders have increased the amount they ride the bus and decreased the amount they ride the subway.

When asked if riders are currently concerned for their safety on the subway, an overwhelming majority voiced concern. Bus riders do not seem to share this level of concern. When asked if they were currently concerned for their safety on the bus, the answer with the most responses (49%) was they are never concerned for their safety on the bus, more than double the percentage of subway riders (21%) who reported never being concerned for their safety. Interestingly though, the majority of both subway riders (74%) and bus riders (58%) have experienced or witnessed verbal harassment or intimidation while using the subway or bus system.

- When asked how their use of the subway system had changed compared to before the pandemic, 49% revealed they use the subway less, 15% used the subway more, and 30% reported their use of the subway had not changed.
- When asked how their use of the bus system had changed compared to before the pandemic 14% reported they used the bus less , 37% revealed they used the bus more, and 43% reported their use of the bus had not changed.
- When asked if they were currently ever concerned for their safety on the subway, 79% reported feeling concerned for their safety either some of the time, a lot of the time, or all the time.
- When bus riders were asked if they were currently concerned for their safety on the bus, 30% reported feeling concerned for their safety some of the time, 8% responded a lot of the time, and 13% responded all the time. A high proportion, 49%, reported never feeling concerned for their safety

#### **BUS RELIABILITY AND RIDE TIME**

In questioning current bus reliability, compared to bus reliability during the first year of the pandemic, it was interesting to note that most participants (33%) chose the answer that bus reliability was about the same, followed closely by less reliable currently (32%), and 19% chose the answer that the buses were more reliable now. In terms of ride times, when participants were asked to compare a typical ride time now compared to the first year of the pandemic, the answer with the most responses was that rides take longer now (40%), followed by the answer that rides take about the same time (33%), while a minority of bus riders chose the answer that bus rides are faster now (9%).

#### CONCLUSION

Because participants reported a high level of overall satisfaction with the subway system, while simultaneously reporting an overwhelmingly high level of concern over personal safety on the subway, it is unclear how the participants defined satisfaction. Generally, respondents appeared to be far less concerned about Covid-19 and the spread of infectious disease than perceived danger in the subway system post Covid-19. A more positive finding is that riders who followed safety protocols might feel comfortable using NYC transit in the event of a future pandemic. A final note of interest is that for both subway and bus riders, when asked how their modes of transportation had changed since the pandemic, both groups reported an increase in walking as a mode of travel.

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## REFERENCES

- Resource Systems Group (RSG), Metropolitan Transit Authority (MTA) "New York City Travel Survey Report", Document number 28971, June 30, 2020, https://new.mta.info/ document/28971
- 2. Centers for Disease Control and Prevention. COVID Data Tracker. Atlanta, GA: U.S. Department of Health and Human Services, CDC; 2024, April 18., https://covid.cdc.gov/covid-data-tracker
- 3. Metropolitan Transit Authority (MTA ) "Spring 2023 Customers Count Survey", Document number 115376, https://new.mta.info/document/115376